Flexible

- Multiple configuration options and extendable PV design
- For new and existing systems
- Compatible with all high-voltage lithium-ion batteries

Efficient

- Most economical AC-connected system on the market
- 97% efficiency

- Integrated dynamic active power limitation for PV inverters

Simple

- One-person installation
- WLAN and intuitive web interface
- Transparency thanks to its direct connection to Sunny Portal / Sunny Places

SUNNY BOY STORAGE 2.5

Simply more independence

The Sunny Boy Storage is the battery inverter for high-voltage batteries from important reputable manufacturers. With a charge and discharge power of 2.5 kW, it is ideally suited to coping with the electricity demand of a private household. The device combines the flexibility of the AC coupling with the advantages of high-voltage technology, enabling a significant reduction in system and installation costs. Thanks to the integrated web server and the direct portal access, commissioning is simple and the energy flows in the household are as transparent as possible.
However electric current is produced and consumed – whether in existing or new PV systems, using wind energy, in CHP plants or to ensure a secure supply in the event of grid failures – the Sunny Boy Storage does it all, both today and in the future, because systems with the Sunny Boy Storage can be flexibly extended at any time on both the generator and battery sides.

Technical data	Sunny Boy Storage 2.5
AC connection	
Rated power (at 230 V, 50 Hz)	2500 W
Max. apparent AC power	2500 VA
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V to 280 V
AC power frequency / range	50 Hz, 60 Hz / −5 Hz to +5 Hz
Rated power frequency / rated grid voltage	50 Hz / 230 V
Max. AC current	11 A
Power factor at rated power	1
Adjustable displacement power factor	0.8 overexcited to 0.8 underexcited
Feed-in phases / connection phases	1 / 1
Battery DC input	
Max. DC power (at cos φ =1)	2650 W
Max. DC voltage	500 V
DC voltage range / DC rated voltage	100 V to 500 V / 360 V
Min. DC voltage / start DC voltage	100 V / 100 V
Max. DC current	10 A
Max. DC short-circuit current	18 A
Battery type	Li-ion*
Efficiency	
Max. efficiency / European weighted efficiency	~97.0% / ~96.5%
Self-consumption with no load and battery consumption / standby	≤ 10 W / ≤ 2 W
Protective devices	
Input-side disconnection point	–
Ground fault monitoring / grid monitoring	● / ●
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated	– / ● / –
All-pole-sensitive residual-current monitoring unit	●
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)	I / III
General data	
Dimensions (W / H / D)	450 / 357 / 122 mm (17.7 / 14.1 / 4.8 inches)
Inverter weight	9.2 kg (20.3 lbs)
Operating temperature range in battery operation	−40°C to +60°C (−40°F to +140°F)
Noise emission, typical	< 25 dB
Topology	Transformerless
Cooling method	Convection
Degree of protection (according to IEC 60529) / climatic category (according to IEC 60721-3-4)	IP65 / 4K4H
Max. permissible value for relative humidity (non-condensing)	1
Features/function/accessories	
DC connection / AC connection	Connector/connector
Integrated web server	●
Interfaces	Ethernet/WLAN
Communication protocols	Modbus (SMA, Sunspec), Webconnect
Battery communication	CAN Bus
Integrated dynamic active power limitation	●
Warranty: Ten years	●
Certificates and approvals (more available upon request)	AS4777, C10/11/2012, CEI0-21, CE, G83/2, DIN EN 62109-1 / IEC 62109-1, VDE-AR-N4105
Certificates and approvals (currently being planned)	NEN 50438, VFR 2014, G59/3 EN50438, RD 1699, VDE0126-1-1, PPC, NRS097, PPDS, IEC61727
Sunny Home Manager / SMA Energy Meter	○ / ○
Retrofittable battery-backup function	Q4 2016

* SMA-approved batteries, e.g. Tesla Powerwall Daily, etc.

● Standard features ○ Optional features – not available
Data in nominal conditions
Technical data is subject to change; status May 2016

Type designation	SBS2.5-1VL-10